

## Article 10 | Parking and Loading

### **Sec. 10.1 Purpose**

The purpose of this section is to reduce hazards to public safety and ensure efficient traffic flow by establishing standards for motorized vehicle parking, for bicycle parking, and for loading areas.

## **Sec. 10.2 General Requirements**

### **10.2.1 Applicability**

The parking standards of this Article shall apply to all proposed development.

### **10.2.2 Facilities Required**

- A.** Parking facilities for motorized vehicles and bicycles shall be provided for all uses located outside of the Downtown Tier.
- B.** Commercial and office developments which provide 400 or more parking spaces shall designate at least 5% of the required spaces as “Park and Ride” spaces; however, no more than 100 spaces shall be required. A sign or signs shall be used to designate that the spaces are reserved for park and ride use during non-holiday weekdays between 6 a.m and 6 p.m. Park and ride spaces, for the purpose of this paragraph, shall be defined as spaces to be occupied by vehicles left by individuals who transferred to other modes of transportation for the remainder of their trip to an off-site location (for example, a driver who transferred from a car to a bus or carpool for the remainder of the trip to work or school). Bus shelters shall be required in the vicinity of the Park and Ride area unless DATA, Triangle Transit, or another publicly-sponsored transit notifies the Planning Department that a shelter is not required.

### **10.2.3 Vehicle Parking Permitted in Residential Districts and Uses**

- A.** Other than townhouses and apartments, residential uses shall only utilize designated driveways within any yard area between the primary structure and the street for parking. Driveways shall be surfaced with an all-weather material with edges clearly delineated and, within the area between the primary structure and the street, shall not exceed 25 feet in width unless wider driveways are shown on an approved site plan or plot plan. Except for driveways, no additional curb cuts or vehicle access points shall be permitted. Parked vehicles shall not block pedestrian walkways
- B.** Except as specified below, vehicles parked in residential areas shall not exceed 35 feet in overall length, eight feet in width or 12 feet in height.
- C.** Parking of buses on the site of and directly associated with an allowed nonresidential use in a residential district shall be allowed.
- D.** Domestic and recreational vehicles such as boats, camper trailers, and utility trailers shall be stored off the street and shall not be located in street and side yards. Multifamily developments may designate a specific area on a site plan for boat and trailer parking for residents of the development.
- E.** Except as permitted in paragraph 5.4.4, Home Occupations, parking of heavy equipment or tractor trailers shall not be allowed. This requirement shall not prohibit commercial vehicles from making deliveries in a residential district.

### **10.2.4 Use of Nonresidential Parking Spaces**

- A.** Required parking spaces shall not be used for the storage or sale of merchandise, vehicle storage, vehicles for sale, or vehicle repair. Non-required spaces proposed for these uses shall be designated on a site plan.

- B. Any area designated for required off-street parking shall not be changed to another use until other parking facilities in conformance with this section are established elsewhere to serve the site.

#### **10.2.5 Calculation of Spaces**

- A. In residential districts in which garage space is shown on the plan, the garage space can be considered in determining whether required parking has been met.
- B. Requirements for the number of parking spaces for motorized vehicles and bicycles for each use are listed elsewhere in this section. The requirements may result in the calculation of a fractional parking space. If the fraction is less than 0.5, the fraction shall be deleted. If the fraction is 0.5 or greater, the fraction shall count as one parking space.

## Sec. 10.3 Required Parking

### 10.3.1 Required Motorized Vehicle and Bicycle Parking

#### A. Parking Rates

1. Rates for off-street motor vehicle and bicycle parking spaces are provided for all uses listed below.
2. Uses not listed shall be reviewed by the Planning Director, or designee, for the appropriate parking rate classification, pursuant to Section 3.1, Interpretation of this Ordinance.
3. Buildings with multiple primary uses shall calculate parking based on the standard for each use in the building, but bicycle parking shall in any case meet the highest minimum standard for the uses.
4. **Parking Rate Table**

Use Category	Specific Use	Motor Vehicle (MV) Spaces	Minimum Bicycle Parking, except in the Downtown and Compact Neighborhood Tiers
<b>AGRICULTURAL USES</b>			
Agriculture	All agriculture	1 acre or less: None; Greater than an acre: 1 per site + 1 per 1,000 SF enclosed floor area	No spaces required
<b>RESIDENTIAL USES</b>			
Household Living	All household living <sup>1</sup>	2 per unit	Multifamily: 1 per 10 units
Group Living	All group living, except as listed below	1 per 4 beds	Dormitories: 1 per 10 beds
	Boarding house, rooming house	1 per bedroom	1 per 3 bedrooms
	Congregate living facility	1 per 2 units + 1 per 4 employees	1 per 20 employees, minimum 2 spaces
	Independent Living Facility	0.6 percent per unit	1 per 20 units, minimum 4 spaces
<b>PUBLIC AND CIVIC USES</b>			
Community Service	All community service	1 per 500 SF floor area	1 per 5,000 SF floor area, minimum 2 spaces
	Auditoriums	1 per 200 SF floor area available for seating in places of assembly, minimum 20 spaces	1 per 2,000 SF floor area available for seating in places of assembly, minimum 2 spaces
	Clubs and lodges	1 per 100 SF floor area	1 per 5,000 SF floor area
	Museums	1 per 300 SF floor area, minimum 10 spaces	1 per 3,000 SF floor area, minimum 2 spaces
Day Care	All day care	1 per employee + 1 per each 10 attendees	2% of required MV parking
Educational Facilities	All educational facilities, except as listed below	6 per classroom + 1 per 300 SF floor area of administrative office space	1 per classroom
	Kindergarten, elementary, middle school	1 per classroom + 1 per 300 SF floor area of administrative office space	1 per classroom
	College or University	1.25 per dorm room + 1 per classroom + 1 per 300SF of administrative office space	20% of provided motor vehicle parking

Use Category	Specific Use	Motor Vehicle (MV) Spaces	Minimum Bicycle Parking, except in the Downtown and Compact Neighborhood Tiers
	Distance Learning Facility	1 per 300 SF floor area	1 per 5,000 SF floor area, minimum 4 spaces
Government Facilities	City, county, state or federal government office	1 per 300 SF floor area + 1 per 3 employees	1 per 3,000 SF floor area + 1 per 30 employees, minimum 4 spaces
	Correctional facilities, jail, prison	1 per 300 SF office area + 1 per 5 beds	1 per 5,000 SF office area, minimum 4 spaces
	Emergency services, fire, sheriff or medical station	1 per employee per shift + 1 per facility vehicle	1 per 8 employees per shift
Medical Facilities	All medical facilities, except as listed below	1 per 250 SF floor area	1 per 5,000 SF floor area, minimum 2 spaces
	Medical laboratory	1 per 500 SF floor area	1 per 10,000 SF floor area, minimum 2 spaces
	Hospital	1 per 2 beds + 1 per doctor and nurse + 1 per 4 employees	1 per 20 employees
Parks and Open Areas	All parks and open areas except as listed below	See Indoor Recreation or Outdoor Recreation, as applicable	20% of provided motor vehicle parking, minimum 4 spaces
	Court, Basketball	4 per court	20% of provided motor vehicle parking, minimum 4 spaces
	Court, Tennis	3 per court	20% of provided motor vehicle parking, minimum 4 spaces
	Dog park	1 per 1,000 SF	None required
	Field, Baseball or softball	20 per field	20% of provided motor vehicle parking, minimum 4 spaces
	Field, Football or soccer	30 per field	20% of provided motor vehicle parking, minimum 4 spaces
	Picnic shelter	1 per table	20% of provided motor vehicle parking, minimum 4 spaces
	Playground	1 per 1,000 SF	20% of provided motor vehicle parking, minimum 4 spaces
	Pool, Indoor	20 per pool	20% of provided motor vehicle parking, minimum 4 spaces
	Pool, Outdoor	10 per pool	20% of provided motor vehicle parking, minimum 4 spaces
	Recreation center	1 per 300 SF floor area	20% of provided motor vehicle parking, minimum 4 spaces
	Trail head	1 per 1,000 linear feet of trail	20% of provided motor vehicle parking, minimum 4 spaces
	Cemetery, mausoleum columbaria, memorial garden	1 per 5 seats in the chapel or assembly area	No spaces required
Passenger Terminals	All passenger terminals	1 per 200 SF waiting floor area + 1 per 2 employees	10% of required MV parking. Minimum 8 spaces. Parking must be covered.
Places of Worship	All places of worship	1 per 28 SF available for seating in the assembly area(s)	5% of provided motor vehicle parking
Social Service Institutions	All social service institutions, except as listed below	1 per 1,500 SF floor area + 1 per employee/volunteer	1 per 5,000 SF floor area, minimum 2 spaces
Utilities	All utilities, except as listed below	1 per 1,000 SF enclosed floor area	2 spaces, where motor vehicle parking is required
	TV/HDTV/AM/FM broadcast facility	1 per 300 SF enclosed floor area	1 per 10,000 SF enclosed floor area
<b>COMMERCIAL USES</b>			
Indoor Recreation	All indoor recreation, except as listed below	1 per 250 SF enclosed floor area	1 per 2,500 SF enclosed floor area, minimum 2 spaces

Use Category	Specific Use	Motor Vehicle (MV) Spaces	Minimum Bicycle Parking, except in the Downtown and Compact Neighborhood Tiers
	Adult establishment, electronic gaming operation, bar, nightclub, movie or theater	1 per 100 SF of floor area	Movie or Theatre: 1 per 1,000 SF of seating area Others: 1 per 2,000 SF floor area , minimum 2 spaces
Outdoor Recreation	All outdoor recreation, except as listed below	1 per 500 SF of enclosed floor area + 1 per 1,000 SF of outdoor use area	10% of required motor vehicle parking, minimum 4 spaces
	Campground, summer camp	1 per campsite + 1 per employee	5% of required MV parking
	Circus ground	1 per 600 SF of the area devoted to the circus, arcade, concessions, etc.	2% of required MV parking
	Clubhouse and/or pool accessory to a residential development	Design Districts: None All other applicable districts: 1 per 100 SF of pool area or clubhouse area, whichever is greater	Design Districts: None All other applicable districts: 10% of required motor vehicle parking, minimum 4 spaces
	Firing range, outdoor such as rifle range, archery, skeet, handgun	Min 5 + 1 per firing position	No spaces required
	Golf course, country club (see "restaurants" for additional parking requirements associated with eating facilities)	4 per hole + 1 per 500 SF floor area	5% of required MV parking
	Stadium or arena, commercial amphitheater, ballfield	1 per 4 seats	1 per 30 seats, minimum 4 spaces, maximum 50 spaces.
Overnight Accommodations	All overnight accommodations, except as listed below	1.25 per room + 1 per 100 SF conference/banquet/restaurant	1 per 15 rooms + 1 per 2,000 SF conference/banquet/restaurant
	Bed and breakfast establishment	1 per guest room + 2 per owner/manager	No spaces required
	Diet house, emergency shelter	1 per 250 SF floor area	1 per 2,500 SF floor area
Restaurants	All restaurants, except as listed below	1 per 100 SF	1 per 2,000 SF floor area, minimum 2 spaces
Retail Sales and Service	All retail sales and service, except as listed below	1 per 200 SF floor area for the first 50,000 SF of Gross Leaseable Area and 1 per 250 SF of leaseable area after that	1 per 5,000 SF floor area, minimum 4 spaces
	Animal hospital, kennel, or veterinarian	1 per 250 SF enclosed floor area	1 per 10,000 SF floor area, minimum 2 spaces
	Artist gallery, bulk mailing service, psychic, medium, security service, studio, taxidermist	1 per 400 SF floor area	1 per 10,000 SF floor area, minimum 2 spaces Security service, taxidermist: No spaces required
	For developments with more than one business: Storage used as general storage for the facility	1 per 1,000 SF floor area	No spaces required
	Outdoor market	1 per 300 SF vendor area	5% of required MV parking
	Repair-oriented services such as appliance, bicycle, canvas product, clock, computer, gun, jewelry, musical instrument, office equipment, radio, shoe, television or watch repair, locksmith, tailor, milliner, upholsterer	1 per 500 SF floor area	1 per 10,000 SF floor area, minimum 2 spaces
Self-Service Storage	All self-service storage	Min. 5 or 1 per 100 storage units, whichever is greater	Min. 2 or 1 per 750 storage units, whichever is greater
Vehicle Sales and Service	All vehicle sales and service, except as listed below	3 per service bay	1 per 20 employees, minimum 2 spaces

Use Category	Specific Use	Motor Vehicle (MV) Spaces	Minimum Bicycle Parking, except in the Downtown and Compact Neighborhood Tiers
	Car wash	2 per wash bay	1 per 20 employees, minimum 2 spaces
	Vehicle sales, leasing or rental; manufactured housing sales	1 per 500 SF enclosed floor area	1 per 20 employees, minimum 2 spaces
<b>OFFICE USES</b>			
<b>Office</b>	All office uses, except as listed below	1 per 250 SF floor area	1 per 5,000 SF floor area, minimum 2 spaces
	Conference center, retreat house	1 per 250 SF seating area	1 per 5,000 SF seating area, minimum 2
<b>INDUSTRIAL USES</b>			
<b>Heavy Industrial</b>	All heavy industrial	1 per 1,000 SF enclosed floor area	2 spaces required
	Wrecking, junk or salvage yard	1 + 1 per 10,000 SF of yard area	2% of required MV parking
<b>Light Industrial Service</b>	All light industrial service, except as listed below	1 per 1,000 SF floor area	1 per 20,000 SF floor area, minimum 2
	Research and Development	1 per 250 SF floor area of office space + 1 per 1,000 SF floor area of laboratory + 1 per 5,000 SF floor area for greenhouses and other material or mechanical storage areas	1 per 5,000 SF office floor area, minimum 2 spaces + 1 per 20,000 SF floor area non-office, minimum 2 spaces
<b>Resource Extraction</b>	All resource extraction	1 per 2 employees, minimum 3	2 spaces required
<b>Warehouse and Freight Movement</b>	All warehouse and freight movement	1 per 5,000 SF of floor area	2% of required MV parking, minimum 2 spaces
<b>Waste-Related Service</b>	All waste-related services	1 per 500 SF enclosed floor area + 1 per 5,000 SF outside storage area	2 spaces required
<b>Wholesale Trades</b>	All wholesale trade	1 per 1,000 SF floor area	1 per 20,000 SF floor area, minimum 2 spaces

<sup>1</sup>For Compact Neighborhood Tier, see paragraph 10.3.1B.7.

## B. Required Parking

- The amount of motor vehicle parking shall be a percent of the amount indicated in paragraph 10.3.1A.4, Parking Rate Table. The minimum and maximum parking rates are as follows:

Location	Minimum	Maximum
<b>Downtown Tier</b>	None	100%
<b>Compact Neighborhood Tier<sup>1</sup>, CI District</b>	80%	100%
<b>Urban Tier</b>	90%	175%
<b>Suburban and Rural Tiers</b>	100%	175%

<sup>1</sup>For all household living within the Compact Neighborhood Tier, see paragraph 10.3.1B.7.

**Example:** The parking schedule is a baseline calculator for the amount of motor vehicle parking for a particular use or uses, subject to the location minimum and maximum requirements of the tier. For example, if a use, per the parking table, generates a rate of 100 spaces, the amount of parking permitted is as follows:

**Downtown:** Minimum-none; maximum - 100 spaces

**Compact Neighborhood or CI District:** Minimum - 80 spaces; maximum - 100 spaces

**Urban:** Minimum - 90 spaces; maximum - 175 spaces

**Suburban and Rural:** Minimum - 100 spaces; Maximum - 175 spaces

2. Bicycle parking rates for the Compact Neighborhood and Downtown Tiers shall be pursuant to paragraph 10.3.3, Bicycle Parking in the Downtown and Compact Neighborhood Tiers.
3. The amount of required parking for colleges or universities within the UC or UC-2 districts shall be determined pursuant to paragraph 6.11.4I, Parking.
4. Unless a use is a college or university, passenger terminal, or located in the Downtown or Compact Neighborhood Tiers, the maximum number of required bicycle parking spaces shall be 100.
5. For the North RTP and Triangle Metro Center Compact Neighborhood Tiers: Uses located in these areas approved prior to January 1, 2006, can utilize the minimum and maximum parking rates established for the Suburban Tier until such time as regional mass transit is available in the applicable tier area.
6. Any change of use within an existing building in the Pedestrian Business sub-district of a CD District, or within a CI District, shall not be required to provide additional parking spaces. New buildings or expansion areas of existing buildings within these districts shall be required to meet all off-street motor vehicle parking requirements.
7. In the Compact Neighborhood Tier, the minimum required motor vehicle parking for household living shall be one parking space per dwelling unit, and the maximum number of motor vehicle parking spaces shall be two parking spaces per dwelling unit.
8. **Methods to Exceed Maximum Parking**  
The maximum amount of motor vehicle parking can be exceeded by any of the following methods:
  - a. The additional parking spaces and drive aisles shall be pervious paving pursuant to the definition of pervious paving in Sec. 16.3, Definitions.
  - b. The additional parking spaces shall be provided as structured parking subject to the following requirements:
    - (1) The footprint of proposed structured parking cannot exceed 75% of the footprint of a surface parking lot designed to accommodate 100% parking; and
    - (2) The maximum height shall be the height permitted within the zoning district.
  - c. The additional parking spaces are underground where parking areas are not visible from the right-of-way or adjacent properties.
  - d. For all sites except in the Downtown Tier and Design Districts: a sealed alternative parking rate analysis, prepared by an engineer with expertise in transportation, that utilizes the following criteria to substantiate the need for



additional parking. The City Transportation Director or designee, or NCDOT, as applicable, shall be the approving authority for the analysis.

- (1) Data or studies of similar sites and uses;
- (2) Comparisons to minimum standards in national published data sources such as Institute of Transportation Engineers (ITE), Urban Land Institute (ULI), National Parking Association (NPA), American Planning Association (APA), or other professionally recognized data sources; and
- (3) Comparisons to minimum requirements of similar municipalities.

**9. Parking Reduction Allowed By-Right**

The minimum amount of motor vehicle parking can be reduced using the following methods for a maximum reduction of 20%:

- a. Shared Parking: Proposed developments or change of use with two or more uses can reduce the total minimum parking requirements by a maximum of 20% if the following factors are demonstrated through a parking generation analysis, prepared and sealed by a registered engineer with transportation expertise, documenting the following:
  - (1) The peak hours for each use do not overlap; and
  - (2) The proposed amount of parking is sufficient to accommodate the anticipated demands for each of the uses at peak hour.
- b. Additional Bicycle Parking and Public Transit  
A maximum 5% reduction is permitted if either of the following is met, and a maximum of 10% if both are met:
  - (1) Proposed development sites or change of use sites where public transit stops exist or will be provided at a location approved by the transit provider as part of the site plan submittal.
    - (a) The stop is within one-quarter mile walking distance; and
    - (b) The stop and development site are connected via an existing or proposed paved and handicap-accessible walkway or sidewalk.
    - (c) Crossings must be at-grade and at appropriate intersections. No mid-block crossings shall satisfy this option.
  - (2) An additional six bicycle parking spaces are provided for every one motor vehicle parking space reduced.

**10. Parking Reductions Allowed with a Minor Special Use Permit**

Reductions of more than 20% of required motor vehicle parking shall require the approval of a minor special use permit pursuant to Sec. 3.9, Special Use Permit. In addition to the findings within paragraph 3.9.8A, General Findings, the following findings shall be made:

- a. Current industry standards and parking rate methodologies were utilized;
- b. Comparable developments that serve similar population densities or development intensities were studied; and

- c. The reduction will protect local, state, or federal designated historic resources, if applicable to the site.

**C. Alternate Forms of Compliance**

**1. Off-site parking, including publicly-controlled parking:**

Proposed development can satisfy motor vehicle parking requirements through existing off-site parking not proposed as part of the development site or change of use pursuant to the following criteria:

- a. All required handicapped accessible parking spaces shall be provided on-site;
- b. The spaces are not on-street parking spaces;
- c. The spaces at the donor site are located no further than 1,000 linear feet walking distance to the main entrance of the proposed facility along an existing or proposed public or private (with pedestrian access agreement) paved, handicapped accessible route;
- d. The walking route to and from the off-site parking does not cross a major thoroughfare or freeway, unless controls are existing or proposed to allow for pedestrian crossing;
- e. Crossings of right-of-way shall be at-grade at appropriate intersections, and not mid-block;
- f. The spaces provided by the donor site are in excess of the minimum parking requirements for that site, or the shared parking requirements pursuant to paragraph 10.3.1B.9.a, can be satisfied;
- g. A lease agreement between the record owners shall be required. The owner of the off-site parking area shall enter into a written agreement in a form acceptable to the City or County Attorney, as appropriate, providing that the land comprising the parking area shall never be disposed of except in conjunction with the sale of the building which the parking area serves so long as the facilities are required; and that such agreement shall bind his heirs, successors, and assigns; and
- h. Residential parking areas cannot serve as off-site parking for non-residential uses.

**2. Urban and Compact Neighborhood Tiers, and the CI District:**

For every twenty-three contiguous feet of street frontage for which there is adjacent permitted on-street parking, the minimum required motor vehicle off-street parking shall be reduced by one space.

- a. Credit for on-street parking shall only be counted towards one of the uses in any multi-use development.
- b. Credit shall not be given for a partial space.
- c. Credit shall not be given for designated handicapped accessible spaces, loading zones, or taxi stands.

- d. Credit cannot be used for single-family or duplex residential development.
- e. On-street parking used to reduce off-street parking is within the public right-of-way and shall remain available for general use subject to public parking standards.

### 10.3.2 Handicapped Accessible Parking

Parking spaces in accordance with the following table shall be provided to accommodate the needs of handicapped individuals.

Off Street Parking Spaces Provided	Minimum Handicapped Accessible Spaces Required
1-25	1
26-50	2
51-75	3
76-100	4
101-150	5
151-200	6
201-300	7
301-400	8
401-500	9
501-1,000	2% of the total spaces provided
1,001 or more	20 spaces, plus one space for every 100 spaces over the first 1,000 spaces provided

### 10.3.3 Bicycle Parking in the Downtown and Compact Neighborhood Tiers

Uses within the Downtown and Compact Neighborhood Tiers shall provide bicycle parking based on the category and square footage of each use.

#### A. Restaurant and Retail Sales and Services

Restaurant and retail sales and services use categories shall provide bicycle parking at a minimum rate of one bicycle parking space per 1,000 square feet of usable floor area.

#### B. All Other Nonresidential Uses

A minimum of two bicycle parking spaces shall be required. For nonresidential uses of 10,000 square feet or more, bicycle parking shall be provided at a minimum rate of one bicycle parking space per 2,500 square feet of usable floor area.

#### C. Residential Uses

For all residential development, bicycle parking shall be provided at a minimum rate of one bicycle parking space per dwelling unit.

## Sec. 10.4 Design Standards

### 10.4.1 General

#### A. Location of Parking

##### 1. Rural and Suburban Tiers

In the Rural and Suburban Tiers, off-street parking may be located in any developable area of a site, excluding all areas required for buffers.

##### 2. Urban Tier

a. In the Urban Tier, at least two-thirds of all off-street parking for nonresidential uses shall be located to the side and rear of structures.

b. In the CI district, all new off-street parking shall be located to the side and/or rear of structures.

##### 3. Compact Neighborhood and Downtown Tiers

a. In all districts within the Compact Neighborhood Tier and the Downtown Tier, surface parking shall be located adjacent to a street only if, in addition to landscaping materials required pursuant to Sec. 9.8, Vehicular Use Area Landscaping, a wall or decorative fence consistent with the requirements of Sec. 9.9, Fences and Walls, with a minimum height of 30 inches is provided, as applicable:

(1) At the build-to line established pursuant to Sec. 6.12, Design Districts; or

(2) In a location no further from the right-of-way than the maximum street yard established pursuant to paragraph 6.10.1, Nonresidential Development Standards.

b. When the required wall or fence is located within a sight distance triangle, the minimum height shall be 24 inches to reduce impediments to traffic visibility.

#### B. Use of Compact Spaces

Up to 20 % of the off-street parking spaces can be sized and designated for compact vehicles.

1. Compact parking spaces shall be signed and/or marked as "Compact."

2. No more than 10 compact spaces shall be located in any given row of parking.

#### C. Marking of Spaces

Nonresidential parking spaces and multifamily parking spaces shall be striped on pavement or designated with some other form of permanent marking.

### 10.4.2 Parking Space Design Standards

Each required off-street parking space shall open directly onto an aisle or driveway which is designed to provide safe and efficient access to each parking space. Parking shall not be allowed to impede traffic movement on alleys or streets or to impede pedestrian or bicycle activities.

**A. Dimensions**

**1. Area**

**a. Standard Spaces**

- (1) A required off-street parking space shall be at least eight feet, six inches in width and 18 feet in length exclusive of any access drives, aisles, or columns.
- (2) Within parking structures, columns can extend into a parking space as follows:
  - (a) Encroachments are not allowed for compact spaces;
  - (b) A maximum of 30% of the total number of parking spaces within the structure can be affected by an encroachment.
  - (c) If the encroachment impacts only one space, then the maximum amount of encroachment shall be 18 inches. If the encroachment impacts two or more adjacent spaces, then the maximum amount of encroachment shall be 24 inches, with a maximum individual encroachment of 18 inches.

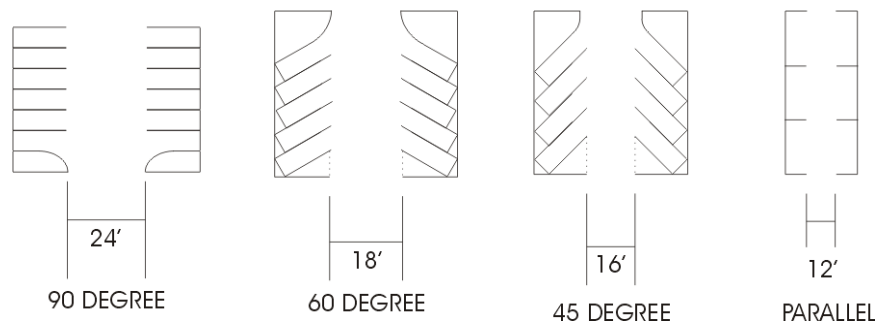
**b. Compact Spaces**

A compact vehicle space shall be at least seven feet, six inches in width and at least 14 feet in length, exclusive of access drives, aisles, or columns.

**c. Parallel Parking**

Parallel parking spaces shall be increased by five feet in length for both regular and compact parking.

2. All spaces shall have a minimum vertical clearance of eight feet.
3. Aisles shall not be less than 24 feet wide for 90 degree parking, 18 feet wide for 60 degree parking, 16 feet wide for 45 degree parking and 12 feet wide for parallel parking. The angle shall be measured between the centerline of the parking space and the centerline of the aisle. No parking shall be allowed in the aisles.



4. The maximum grade permitted for any required parking shall not exceed 8%.
5. Alternative Forms of Compliance
  - a. Parking spaces using geometric standards other than those specified in this Ordinance may be approved by the City Transportation Director or designee if

the alternative standards are developed and sealed by a registered engineer with expertise in parking facility design, demonstrating that the alternate dimensional standards satisfy off-street parking requirements as adequately as would a facility using standard Ordinance dimension.

- b. Valet Parking:** Valet parking can be approved as a means of satisfying otherwise applicable off-street parking design requirements where all of the following standards are met:
  - (1) Adequate assurance of the continued operation of the valet parking, such as a contractual agreement for valet services or the tenant's affidavit agreeing to provide such services, is provided.
  - (2) An equivalent number of valet spaces shall be available to replace the required parking spaces. Such valet spaces do not require individual striping, and can include the tandem or mass parking of vehicles.
  - (3) If located off-site, valet parking shall meet the requirements of paragraph 10.3.1C.1, except for paragraph 10.3.1C.1(c).

**B. Plan**

Parking design for nonresidential and multifamily uses shall be approved as part of site plan review.

**C. Lighting**

Parking lot lighting shall be shielded so that it does not cast direct light beyond the property line (see Sec. 7.4, Outdoor Lighting). Parking lots shall be illuminated during night business hours.

**D. Surfacing**

**1. In the Rural Tier**

All required vehicle use areas and driveways, except for those associated with single family detached dwellings, shall be covered with an all-weather surface designed to support anticipated loads.

- a.** Loose material surfaces shall be contained with a permanent edging.
- b.** The surface shall be maintained so that traffic may move safely in and out of the parking area.
- c.** When loose material is used, parking blocks are required to designate each parking space when the vehicle use area is greater than ten parking spaces.

**2. In All Other Tiers**

- a.** All required vehicle use areas and driveways, and all vehicle use areas and driveways proposed in the Downtown Tier, except for those associated with single-family dwellings, shall be paved in accordance with standards and specifications of the City Public Works Department.
- b.** All excess vehicle use areas, and those associated with single-family dwellings, shall be covered with an all-weather surface designed to support anticipated loads.

- (1) Loose material surfaces shall be contained with a permanent edging.
- (2) The surface shall be maintained so that traffic may move safely in and out of the parking area.
- (3) When loose material is used, parking blocks are required to designate each parking space when the vehicle use area is greater than ten parking spaces.

#### **10.4.3 Design Standards for Handicapped Accessible Parking**

- A. All off-street handicapped accessible parking spaces shall be located in the closest parking area to a public entrance to the building but no more than 250 feet from such entrance.
- B. All off-street handicapped accessible parking spaces shall be paved in accordance with standards and specifications of the City Public Works Department.
- C. All off-street handicapped accessible parking spaces shall be designated by a sign or other means specified by State requirements.

#### **10.4.4 Design Standards for Bicycle Parking**

##### **A. General Standards**

1. Where bicycle parking facilities are not clearly visible to approaching cyclists, signs shall be posted to direct cyclists to the facilities.
2. Bicycle racks that are placed parallel to each other shall be spaced at least 30 inches apart. Bicycle racks shall be spaced 24 inches from walls, curb faces, pavement edges, and other obstructions.
3. An aisle or other space shall be provided for bicycles to enter and leave the facility. The aisle shall have a width of at least four feet to the front or the rear of a standard six-foot bicycle parked in the facility. Bicycle parking shall remain accessible and not be rendered unusable by fixed or movable objects.
4. Each bicycle parking space shall be sufficient to accommodate a bicycle at least six feet in length and two feet wide. Overhead clearance shall be at least seven feet.
5. Outdoor bicycle parking spaces shall be clearly marked as such and shall be separated from motorized vehicle parking by a physical barrier designed to protect a bicycle from being hit by a motorized vehicle.
6. For outdoor bicycle parking, each bicycle parking space shall be provided with a rack permanently anchored to a foundation to which a bicycle frame and both wheels may be conveniently secured using either a chain and padlock or a U-lock. The rack shall support a standard bicycle frame at two points of contact without damage to frame, wheels, or components. Examples of acceptable rack types are the "inverted U-rack," and the "swerve rack."
7. Outdoor bicycle parking facilities shall be surfaced in the same manner as the motorized vehicle parking area, level, and accessible to the street.
8. Lighting and other security design features shall be provided in outdoor or structured bicycle parking facilities equivalent to that provided in the facilities for motorized vehicles.

**B. Standards for the Downtown Tier and Design Districts within Other Tiers**

**1. General Standards**

- a.** Bicycle parking shall be located to not impede pedestrian or motorized vehicle movement into or around the site.
- b.** Bicycle parking shall be installed in accordance with the guidelines set forth in the Durham Design Manual.

**2. Standards for Restaurant and Retail Sales and Service Uses**

- a.** Required bicycle parking spaces shall be located within 50 feet of the primary building entrance and visible from the public right-of-way.
- b.** Bicycle racks can be placed in the public right-of-way with approval from the City or State and where such racks do not conflict with pedestrian use.
- c.** In order to reduce streetscape clutter and provide greater visibility for bicycle parking areas, clustered facilities can be provided when located a maximum of 100 feet from the primary building entrance so long as they remain within the blockface.

**3. Standards for Residential Uses**

- a.** Required residential bicycle parking can only be provided internal to the dwelling unit if a designated bicycle storage space is provided.
- b.** The bicycle storage space can be provided within the residential unit or as a designated bike storage area.

**4. Standards for All Other Uses**

- a.** Bicycle parking shall be located within 100 feet of the primary or secondary entrance to the building.
- b.** Bicycle parking in a bicycle storage room, bicycle lockers, or bicycle racks within a building or parking structure can be provided to meet this requirement.
- c.** Bicycle parking located internal to a building shall not require access via stairs.

**C. Standards for Other Tiers**

- 1.** Bicycle parking locations shall be easily accessible and shall not impede pedestrian or vehicular circulation.
- 2.** Bicycle parking, except as otherwise permitted below, shall be located either between the vehicle use area and the facade containing the main entrance of the building, or no further from the building's main entrance than the closest motorized vehicle parking space, excluding parking for persons with disabilities. When there are multiple main entrances, bicycle parking shall be distributed to accommodate each entrance.
  - a.** For non-residential and multi-family residential uses, bicycle parking can be located up to 100 feet from a main entrance, if the following is provided.
    - (1)** The parking area is covered by a permanent canopy.



- (2) The parking area is visible from the front door of the building's main entrance.
    - (3) The canopy provides at least 72 inches in cover for the direction that bicycles will be oriented.
    - (4) Lighting shall be provided in the bicycle parking area equivalent to that provided in facilities for motorized vehicles.
  - b.** Bicycle parking facilities within the CI District shall be located within 50 feet of the primary building entrances and be visible from the public right-of-way. Racks pursuant to paragraph 10.4.4A shall be provided as part of the streetscape amenities.
  - c.** Requirements for bicycle parking can be met by other methods as follows:
    - (1) Bicycle storage rooms or bicycle lockers within the primary structure(s);
    - (2) Bicycle racks, pursuant to paragraph 10.4.4.A, or bicycle lockers in a parking structure; or
    - (3) Bicycle racks pursuant to paragraph 10.4.4A within the public right-of-way where such racks do not conflict with pedestrian use and encroachment agreements with the City or NCDOT, as applicable, have been obtained.
- 3.** When a percentage of the required motorized vehicle spaces are provided in a structure, an equal percentage of the required bicycle spaces shall be located inside that structure, unless other accessible, covered bicycle parking is located elsewhere on the site.

## Sec. 10.5 Vehicle Stacking

### 10.5.1 Minimum Number of Spaces

A. Off-street stacking spaces shall be provided as follows:

Activity type	Minimum stacking spaces in the Design Districts	Minimum stacking spaces in all other districts	Measured from the stacking lane entry to the following point of service:
Automated teller machine (drive-up)	1	3	Teller machine
Bank teller lane	n/a <sup>1</sup>	4	Teller or window
Car wash bay, full-service	n/a <sup>1</sup>	6	Bay
Car wash bay, self-service	n/a <sup>1</sup>	3	Bay
Dry cleaning/laundry drive-through	n/a <sup>1</sup>	3	Cleaner/laundry window
Gasoline fueling	2	2	Fueling position
Gatehouse, staffed	2	4	Gatehouse
Gate, unstaffed	1	2	Gate
Pharmacy pick-up	n/a <sup>1</sup>	3	Pharmacy window
Restaurant drive-through with combined order/pick-up window(s)	n/a <sup>1</sup>	6 per window	Order/pick-up window
Restaurant drive-through with separate order point(s) and pick-up window(s)	n/a <sup>1</sup>	4 in addition to either	Each pick-up window
	n/a <sup>1</sup>	6	Order point closest to stacking lane entry for each undivided order lane
	n/a <sup>1</sup>	or 4	Order point closest to stacking lane entry for each divided order lane
Schools (kindergarten through grade 12)	As required per NCDOT Municipal and School Transportation Assistance (MSTA) Standards		
Valet parking	2	3	Valet stand

<sup>1</sup> An existing non-conforming use in Design Districts shall comply with the minimum stacking space requirement for all other districts.

- B. A minimum stacking space number includes the space at the point of service. A drive-through facility with unspecified activity type shall comply with the most stringent stacking requirement(s) applicable in the zoning district in which the facility is located as determined by the Planning Director.
- C. Uses not listed shall be reviewed by the Planning Director or designee for the appropriate stacking rate classification, pursuant to Section 3.1, Interpretation of this Ordinance.

### 10.5.2 Design and Layout of Stacking Spaces

Required stacking spaces shall be subject to the following design and layout standards:

**A. Size**

Stacking spaces shall be a minimum of eight feet in width by 20 feet in length.

**B. Location**

Stacking spaces shall not impede on- or off-site traffic movements or movements into or out of off-street parking spaces.

**C. Design**

Stacking spaces shall be separated from other internal driveways by raised medians if deemed necessary by the City Transportation Director or NCDOT, or appropriate designees, for traffic movement and safety.

**10.5.3 Alternative Forms of Compliance**

Alternatives to the requirements indicated above are permitted through approval by the City Transportation Director or designee, or NCDOT, as applicable, of a sealed traffic management plan, prepared by an engineer with expertise in transportation, utilizing one or more of the following:

**A.** Collection of data or studies of similar sites and uses;

**B.** Comparisons to minimum standards in national published data sources such as Institute of Transportation Engineers (ITE), Urban Land Institute (ULI), National Parking Association (NPA), American Planning Association (APA), or other professionally recognized data sources; or

**C.** Comparisons to minimum requirements of similar municipalities.

## **Sec. 10.6 Loading Areas**

### **10.6.1 Location**

No loading spaces shall be located within 30 feet of street intersections or in any required yard space, except in the CI District and Design Districts where the required distance shall be 20 feet. Street intersections shall be measured from the back of the predominant curbline (not including bulb outs) or future curbline where no curb currently exists.

### **10.6.2 Surfacing**

#### **A. In the Rural Tier**

All open off-street loading areas shall be surfaced with an all-weather material such as concrete, asphalt, or at least six inches of properly compacted crushed stone, designed to carry the heaviest vehicle loads that can commonly be expected, including the weight of fire and sanitation equipment as well as delivery vehicles. Loading areas surfaced with loose materials such as crushed stone shall provide permanent edging around the area.

#### **B. In All Other Tiers**

All open off-street loading areas shall be paved with an all-weather material such as concrete or asphalt, designed to carry the heaviest vehicle loads that can commonly be expected, including the weight of fire and sanitation equipment as well as delivery vehicles.

### **10.6.3 Utilization**

Space allocated to any off-street loading space, accessory drives, or aisles, shall not be used to satisfy the space requirements for any off-street parking or trash handling facilities.

### **10.6.4 Ingress and Egress**

Each required off-street loading space shall be provided with a means of unobstructed ingress and egress to an alley or onto a public street wide enough to accommodate expected vehicles. Where such ingress and egress is made into a public street, it shall be through driveways or openings which meet required standards. Permanent wheel stops or curbing shall be provided to prevent any vehicle using the loading area from encroachment on the required street yards, side yards, or adjacent property.

### **10.6.5 Off-Street Loading Requirements**

- A.** Loading spaces shall be required for uses which normally handle large quantities of goods, including but not limited to industrial plants, wholesale establishments, warehouses, freight terminals, hospitals and retail establishments.
- B.** Off-street loading spaces can be either inside or outside the building and on the same or adjoining lots.
- C.** Any loading area outside of the DD District located adjacent to a residential use shall not receive deliveries between the hours of 11 p.m. and 6 a.m.
- D.** Loading spaces shall not hinder the movement of traffic or pedestrians.

- E. No motor vehicle repair work or service of any kind shall be permitted in conjunction with loading facilities provided in any district.

**F. Dimensional Requirements**

1. Off-street loading spaces, excluding maneuvering areas, shall be a minimum of 10 feet wide by 25 feet long.
2. Vertical clearance shall be a minimum of 14 feet.

- G. Loading areas shall be signed to indicate "No Idling."

**10.6.6 Landscaping and Screening Requirements**

- A. Landscaping in accordance with Section 9.8, Vehicular Use Area Landscaping, shall be provided for loading spaces and associated drive aisles.
- B. Where project boundary buffers are not required, loading docks shall be screened from public streets and adjacent residential property in accordance with screening requirements of Section 9.7, Screening.

**10.6.7 Residential Setback Requirements**

A minimum setback of 50 feet shall be required where loading docks face a residential district or a structure with first-floor residential uses, unless the loading area (dock and/or loading spaces) is completely screened from view with a wall in accordance with the requirements of Sec. 9.9, Fences and Walls.

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